

Amendments to the Claims

1.(currently amended) A method of using electromagnetic radiation to sense media speed, the method comprising:

rotating a media having a pattern of reflective and non-reflective regions aligned circularly about a rim of the media or a pattern of magnetic and non-magnetic regions aligned circularly about a rim of the media;

sensing a frequency of electromagnetic radiation radiating from the reflective regions of the pattern or from the magnetic regions of the pattern with a stationary detector;

determining from the sensed frequency a rotational speed of the media; and
controlling, with the sensed frequency, a rotational speed of the media.

2.(canceled)

3.(previously presented) The method of claim 1 wherein the pattern comprises a spoke pattern on the media.

4.(previously presented) The method of claim 1 wherein the pattern comprises a gear-tooth pattern on the media.

5-6.(canceled)

7.(previously presented) The method of claim 1 wherein the rim comprises an inner rim of the media.

8-12.(canceled)

13.(currently amended) A mass storage device comprising;
a rotation device configured to rotate mass storage media having a pattern of reflective and non-reflective regions aligned circularly about a rim of the media ~~or a pattern of magnetic and non-magnetic regions aligned circularly about a rim of the media;~~

an electromagnetic radiation source directed at the rim, wherein electromagnetic radiation radiated from the reflective regions of the pattern originates from the electromagnetic radiation source directed at the rim;

an electromagnetic radiation sensor configure to sense a frequency of electromagnetic radiation radiated from the reflective regions of the pattern or from the magnetic regions of the pattern as the media rotates; and

a controller coupled to the electromagnetic radiation sensor, the controller configured to control, with a sensed frequency of electromagnetic radiation radiated from the reflective regions of the pattern or from the magnetic regions of the pattern, a rotational speed of the media.

14.(canceled)

15.(previously presented) The mass storage device of claim 13 wherein the sensor is disposed to sense electromagnetic radiation reflected from a spoke pattern on the media.

16.(previously presented) The mass storage device of claim 13 wherein the sensor is disposed to sense electromagnetic radiation reflected from a gear-tooth pattern on the media.

17.(currently amended) The mass storage device of claim 13 ~~44~~ the electromagnetic radiation source includes a coherent electromagnetic radiation source.

18.(currently amended) The mass storage device of claim 13 ~~44~~ the electromagnetic radiation source includes a non-coherent electromagnetic radiation source.

19.(original) The mass storage device of claim 13 wherein the rotation device includes:

a spindle coupled to the media and

a motor coupled to the spindle.

20.(previously presented) The mass storage device of claim 19 wherein the controller includes a motor controller configured to control the motor.

21.(previously presented) The mass storage device of claim 13 wherein the the rim comprises an inner rim of the media.

22-24.(canceled)

25.(currently amended) The mass storage device of claim 13 wherein the controller includes a radial positioner for controlling a placement of a beam of the electromagnetic radiation on the media.

26.(previously presented) A mass storage device having media that is rotateable, comprising;

means for sensing electromagnetic radiation with a stationary sensor from a pattern of reflective and non-reflective regions aligned circularly about a rim of the media or a pattern of magnetic and non-magnetic regions aligned circularly about a rim of the media;

means for controlling the rotational speed of the media based on the sensed electromagnetic radiation;

means for positioning radially an electromagnetic source with respect to a surface of the media; and

means for controlling exposure of the media by the electromagnetic source in conjunction with the means for controlling and the means for positioning.

27.(currently amended) The mass storage device of claim 26 wherein the pattern includes a pattern of reflective and non-reflective regions aligned circularly about a rim of the media and the mass storage device further including means for sourcing electromagnetic radiation directed at the rim, wherein the electromagnetic radiation radiated from the reflective regions of the pattern ~~or from the magnetic regions of the pattern~~ originated from the electromagnetic radiation source directed at the rim.

28.(original) The mass storage device of claim 27 wherein the means for sensing is disposed to sense electromagnetic radiation from a spoke pattern on the media.

29.(original) The mass storage device of claim 27 wherein the means for sensing is disposed to sense electromagnetic radiation from a gear-tooth pattern on the media.

30.(previously presented) The mass storage device of claim 27 wherein the means for sourcing electromagnetic radiation includes a coherent electromagnetic radiation source.

31.(previously presented) The mass storage device of claim 27 wherein the means for sourcing electromagnetic radiation includes a non-coherent electromagnetic radiation source.

32.(previously presented) The mass storage device of claim 27 wherein the means for sourcing electromagnetic radiation includes a coherent electromagnetic radiation emitter.

33.(previously presented) The mass storage device of claim 27 wherein the means for sourcing electromagnetic radiation includes a non-coherent electromagnetic radiation emitter.

34.(original) The mass storage device of claim 26 wherein the means for controlling the rotational speed includes:
a spindle coupled to the media and
a motor coupled to the spindle.

35.(previously presented) The mass storage device of claim 34 wherein the means for controlling rotational speed includes a motor controller configured to control the rotational speed of the media to 0.25 meters/second at an accuracy of 0.02 percent.

36-37.(canceled)

38.(original) The mass storage device of claim 26 wherein the means for controlling includes placement means for controlling a placement of a beam of the electromagnetic radiation on the media.

39.(previously presented) A program storage system readable by a computer, tangibly embodying a program, applet, or instructions executable by the computer to perform method steps for using sensed electromagnetic radiation to sense media speed, the media having a pattern of reflective and non-reflective regions aligned circularly about a rim of the media or a pattern of magnetic and non-magnetic regions aligned circularly about a rim of the media, the method comprising:
rotating the media;
sensing a frequency of electromagnetic radiation radiating from the reflective regions of the pattern or from the magnetic regions of the pattern; and
controlling, with the sensed frequency, a rotational speed of the media.

40.(previously presented) The program storage system of claim 39, further comprising determining from the sensed frequency a rotational speed of the media.

41-44(canceled)

45.(previously presented) The program storage system of claim 39 wherein controlling a rotational speed of the media includes controlling the rotational speed of a spindle onto which the media is fixed.

46.(previously presented) The program storage system of claim 39 wherein controlling a rotational speed of the media includes controlling the rotational accuracy of a spindle onto which the media is fixed to allow placement to within a quarter of a pixel at 600 dpi on the media.

47-50.(canceled)